

<120> NOVEL MOTOR PROTEIN OF P. FALCIPARUM AND
METHODS FOR ITS USE

<160> 10

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<211> 3931

<212> DNA

<213> Plasmodium falciparum

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<210> 2

<211> 1288

<212> PRT

<213> Plasmodium falciparum

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<213> Plasmodium falciparum

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 aatacattaa gatattcttc aagagttaag aactttaaaa ataaatctac atgtataaat 1020
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 <213> P. Falciparum

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 35 40 45
 Glu Arg His Glu Phe Ile Val Asp Lys Val Phe Asp Asp Thr Val Asp
 50 55 60
 Asn Phe Thr Val Tyr Glu Asn Thr Ile Lys Pro Leu Ile Ile Asp Leu
 65 70 75 80
 Tyr Glu Asn Gly Cys Val Cys Ser Cys Phe Ala Tyr Gly Gln Thr Gly
 85 90 95
 Ser Gly Lys Thr Tyr Thr Met Leu Gly Ser Gln Pro Tyr Gly Gln Ser
 100 105 110
 Asp Thr Pro Gly Ile Phe Gln Tyr Ala Ala Gly Asp Ile Phe Thr Phe
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 Leu Asn Ile Tyr Asp Lys Asp Asn Thr Lys Gly Ile Phe Ile Ser Phe
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 Tyr Glu Ile Tyr Cys Gly Lys Leu Tyr Asp Leu Leu Gln Lys Arg Lys

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	180		185		190	
Ile Asp Gly Val Leu Leu Arg Lys Ile Gly Val Asn Ser Gln Asn Asp						
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Glu Ser Ser Arg Ser His Ala Ile Leu Asn Ile Asp Leu Lys Asp Ile						
	210		215		220	
Asn Lys Asn Thr Ser Leu Gly Lys Ile Ala Phe Ile Asp Leu Ala Gly						
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	245		250		255	
Asp Gly Ala Asn Ile Asn Arg Ser Leu Leu Ala Leu Lys Glu Cys Ile						
	260		265		270	
Arg Ala Met Asp Ser Asp Lys Asn His Ile Pro Phe Arg Asp Ser Glu						
	275		280		285	
Leu Thr Lys Val Leu Arg Asp Ile Phe Val Gly Lys Ser Lys Ser Ile						
	290		295		300	
Met Ile Ala Asn Ile Ser Pro Thr Ile Ser Cys Cys Glu Gln Thr Leu						
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Asn Thr Leu Arg Tyr Ser Ser Arg Val Lys Asn Phe Lys Asn Lys Ser						
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 gatacggttg ataatttcac agtatatgag aataccataa aaccattaat aatagattta 240
 tatgagaatg gttgtgtatg ttcttgtttt gcttatgggc aaacaggtag cgggaagact 300
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Leu	Tyr	Ile	Asp	Glu	Pro	Arg	Tyr	Lys	Val	Asp	Met	Thr	Lys	Tyr	Ile
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Glu	Arg	His	Glu	Phe	Ile	Val	Asp	Lys	Val	Phe	Asp	Thr	Val	Asp	
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Tyr	Glu	Asn	Gly	Cys	Val	Cys	Ser	Cys	Phe	Ala	Tyr	Gly	Gln	Thr	Gly
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Ser	Gly	Lys	Thr	Tyr	Thr	Met	Leu	Gly	Ser	Gln	Pro	Tyr	Gly	Gln	Ser
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			260					265					270		
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	290					295					300				
Met	Ile	Ala	Asn	Ile	Ser	Pro	Thr	Ile	Ser	Cys	Glu	Gln	Thr	Leu	
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Leu	Glu	Gly	Lys	Pro	Ile	Pro	Asn	Pro	Leu	Leu	Gly	Leu	Asp	Ser	Thr
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- 9 -

<211> 987
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987

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Ile Asp Glu Pro Arg Tyr Lys Val Asp Met Thr Lys Tyr Ile Glu Arg
          35          40          45
His Glu Phe Ile Val Asp Lys Val Phe Asp Asp Thr Val Asp Asn Phe
          50          55          60
Thr Val Tyr Glu Asn Thr Ile Lys Pro Leu Ile Ile Asp Leu Tyr Glu
          65          70          75          80
Asn Gly Cys Val Cys Ser Cys Phe Ala Tyr Gly Gln Thr Gly Ser Gly
          85          90          95
Lys Thr Tyr Thr Met Leu Gly Ser Gln Pro Tyr Gly Gln Ser Asp Thr
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Pro Gly Ile Phe Gln Tyr Ala Ala Gly Asp Ile Phe Thr Phe Leu Asn
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Ile Tyr Asp Lys Asp Asn Thr Lys Gly Ile Phe Ile Ser Phe Tyr Glu
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Ile Tyr Cys Gly Lys Leu Tyr Asp Leu Leu Gln Lys Arg Lys Met Val
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Ala Ala Leu Glu Asn Gly Lys Lys Glu Val Val Val Lys Asp Leu Lys
          165          170          175
Ile Leu Arg Val Leu Thr Lys Glu Glu Leu Ile Leu Lys Met Ile Asp
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Gly Val Leu Leu Arg Lys Ile Gly Val Asn Ser Gln Asn Asp Glu Ser
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225					230					235					240
Arg	Gly	Ala	Asp	Thr	Val	Ser	Gln	Asn	Lys	Gln	Thr	Gln	Thr	Asp	Gly
				245					250					255	
Ala	Asn	Ile	Asn	Arg	Ser	Leu	Leu	Ala	Leu	Lys	Glu	Cys	Ile	Arg	Ala
			260					265					270		
Met	Asp	Ser	Asp	Lys	Asn	His	Ile	Pro	Phe	Arg	Asp	Ser	Glu	Leu	Thr
	275					280						285			
Lys	Val	Leu	Arg	Asp	Ile	Phe	Val	Gly	Lys	Ser	Lys	Ser	Ile	Met	Ile
	290					295					300				
Ala	Asn	Ile	Ser	Pro	Thr	Ile	Ser	Cys	Cys	Glu	Gln	Thr	Leu	Asn	Thr
305					310					315					320
Leu	Arg	Tyr	Ser	Ser	Arg	Val	Lys	Asn	Phe	Lys	Asn				
				325					330						